

Appl. No. 09/661,927

PATENT

Amdt. dated January 17, 2008

Amendment under 37 CFR 1.116 Expedited Procedure

Examining Group 1639

Amendments to the Claims:

The following is a complete list of claims indicating the changes incorporated by the present amendment and replacing all prior versions of the claims. Any claims canceled herein and all deletions made in claims that are not canceled herein are done so without prejudice to being re-instituted at a later date in this or a related application.

Listing of Claims:

1. **(Currently amended)** A method of screening for a substrate to a carrier-mediated transport protein ~~expressed on the plasma membrane of a cell surface~~, comprising:
 - (a) providing a library comprising different complexes, each complex comprising a compound and a separate reporter, the compound varying between different complexes;
 - (b) providing a population of cells, each cell having a surface comprising a plasma membrane, one or more of the cells expressing one or more carrier-mediated transport proteins on the plasma membrane of the cell surface;
 - (c) contacting the population of cells with a plurality of complexes from the library simultaneously; and
 - (d) detecting a signal from the reporter of a complex while internalized within a cell, wherein the reporter preferentially generates the signal once the reporter is internalized within the cell rather than from complexes binding to the surface of the cell, the signal thus providing an indication that a complex whose reporter generated the signal comprises a compound that is a substrate for a carrier-mediated transport protein expressed on the plasma membrane of the cell surface,

provided that if the reporter comprises a fluorophore, the complex comprises a compound, a fluorophore and a quencher, and the fluorophore is linked to the quencher by a linker susceptible to cleavage within the cell, whereby the quencher quenches fluorescence from the fluorophore outside the cell and is cleaved from the fluorophore within the cell after the